CLAIMS

We claim:

1. An infant care apparatus, said apparatus comprising a base having an infant support on which an infant is positioned, an upper housing supporting a radiant heater mounted to said base at a fixed vertical distance above said infant support, a canopy mounted to said base, said canopy being movable between a lower position wherein said canopy fits over said infant support to form an infant compartment adapted to enclose an infant and an upper position wherein said canopy is elevated with respect to said infant support and the infant compartment is open, said canopy having an opening formed therein located so as to be positioned between said radiant heater and said infant support when said canopy is in said upper position to allow said radiant heater to direct radiant energy through said opening toward said infant support, said canopy having at least one door having a closed position blocking said opening when said canopy is in said lower position and an open position when said canopy is in said upper position, said door being openable and closable as said canopy moves, respectively, from its lower position to its upper position and from its upper position to its lower position, said at least one door having an upper surface when in the closed position, said infant care apparatus further having an object sensing means adapted to sense the presence of an object resting upon the upper surface of the at least one door when the at least one door is in its closed position.

2. The infant care apparatus as defined in claim 1 wherein said at least one door comprises a pair of doors.

3. The infant care apparatus as defined in claim 1 wherein said object sensing means comprises a sensing ring movably mounted to said upper housing, said sensing ring adapted to be moved when said sensing ring contacts an object resting upon the upper surface of the at least one door, and a means to

detect the movement of the sensing ring to provide a signal indicative of the presence of an object on the upper surface of the at least one door.

4. The infant care apparatus as defined in claim 3 wherein the signal indicative of the presence of an object is an electrical signal.

5. An infant care apparatus as defined in claim 3 wherein said sensing ring is pivotally mounted to said upper housing and said sensing ring pivots when said sensing ring contacts an object.

6. An infant care apparatus as defined in claim 1 wherein said object sensing means comprises at least one finger extending downward from said upper housing said at least one finger is adapted to be moved when said at least one finger contacts an object resting upon the upper surface of the at least one door, and a means to detect the movement of the at least one finger to provide a signal indicative of the presence of an object on the upper surface of the at least one door.

7. An infant care apparatus as defined in claim 6 wherein said at least one finger comprises a plurality of fingers.

8. An infant care apparatus as defined in claim 6 wherein said at least one door comprises a plurality of doors.

9. An infant care apparatus as defined in claim 1 wherein said object sensing means comprises at least one optical detector mounted to said upper housing to sense objects on the upper surface of the at least one door.

10. An infant care apparatus as defined in claim 9 wherein said at least one optical detector comprises a plurality of optical detectors.

11. An infant care apparatus as defined in claim 1 wherein the object sensing means includes an audible and/or visual alarm to provide an indication to

a user as to the presence of an object resting atop the upper surface of the at least one door.

12. An infant care apparatus as defined in claim 1 wherein the object sensing means terminates the movement of the canopy.

13. An infant care apparatus, said apparatus comprising a base having an infant support on which an infant is positioned, an upper housing having a radiant heater mounted to said base at a fixed vertical distance above said infant support, a canopy mounted to said base, said canopy being movable between a lower position wherein said canopy fits over said infant support to form an infant compartment adapted to enclose an infant and an upper position wherein said canopy is elevated with respect to said infant support and the infant compartment is open, said canopy having an opening formed therein located so as to be positioned between said radiant heater and said infant support when said canopy is in said upper position to allow said radiant heater to direct radiant energy through said opening toward said infant support, said canopy having at least one door, said at least one door having a closed position blocking said opening when said canopy is in said lower position and an open position when said canopy is in said upper position, said door having an upper surface said door is in said closed position, said at least one door being biased toward said closed position, said at least one door being closable by an interaction between said at least one door and a fixed member of the infant warming apparatus when said canopy moves from its lower position to said upper position and an object sensing means adapted to sense the presence of an object resting upon the upper surface of the at least one door when the at least one door is in its closed position.

14. The infant care apparatus as defined in claim 13 wherein said at least one door comprise a pair of doors.

15. The infant care apparatus as defined in claim 13 wherein said object sensing means comprises a sensing ring movably mounted to said upper housing, said sensing ring adapted to be moved when said sensing ring contacts

an object resting upon the upper surface of the at least one door, and a means to detect the movement of the sensing ring to provide a signal indicative of the presence of an object on the upper surface of the at least one door.

16. An infant care apparatus as defined in claim 13 wherein said object sensing means comprises at least one finger extending downward from said upper housing said at least one finger is adapted to be moved when said at least one finger contacts an object resting upon the upper surface of the at least one door, and a means to detect the movement of the at least one finger to provide a signal indicative of the presence of an object on the upper surface of the at least one door.

17. An infant care apparatus as defined in claim 13 wherein said object sensing means comprises at least one optical detector mounted to said upper housing to sense objects on the upper surface of the at least one door.

18. A method of providing care to an infant, said method comprising the steps of:

providing an infant care apparatus having an infant support for supporting an infant and a radiant heater located at a fixed height above the infant support, the apparatus further having a vertically movable canopy that moves between a lower position where it covers the infant support and an upper position,

providing an opening in the canopy located to allow energy from the radiant heater to pass through the opening to impinge upon the infant support when the canopy is in its upper position

providing a door having an open position to allow radiant energy to pass through the opening and a closed position wherein the opening is blocked,

opening the door when the canopy moves from its lower position to its upper position and closing the door when the canopy moves from its upper position to its lower position,

detecting the presence of an object resting on the upper surface of the door when the door is in its closed position,

preventing the upward movement of the canopy when an object is

detected on the upper surface of the door.

19. The method as defined in claim 18 wherein the step of detecting the presence of an object comprises providing an optical sensor to detect the presence of an object on the upper surface of the door.

20. The method as defined in claim 18 wherein the step of detecting the presence of an object comprises physically contacting an object and providing a signal indicative of an object being sensed.